

				EXTERI	OR UNIT	INTERI	OR UNIT
BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT	LENGTH	WEIGHT
B1	4	• 4	STR	23'- 4"	62	23'- 7"	62
S1	8	* 4	3	4'- 3"	23	4'- 3"	23
S2	88	* 4	3	5'- 4"	314	5'- 4"	314
* S3	46	* 5	1	5'- 3"	252		
	ORCING				BS. 400		400
* EP0)	Y COATI	D REIN	FORCING	S STEEL	LBS. 252		
5,000	P.S.I.CO	NCRETE		CU. Y	DS. 6.3		6.3
0.6"Ø	L.R. STR	ANDS	No.		16		16

DEAD LOAD DEFLECTIO	N AND CAMBER
	3'-0"× 1'-9"
	0.6"Ø L.R. STRAND
CAMBER (SLAB ALONE IN PLACE)	1" 1
DEFLECTION DUE TO SUPERIMPOSED DEAD LOAD***	3/16″ ∤
FINAL CAMBER	13/16" 1

	HAL CAMBE			
**	INCLUDES	FUTURE	WEARING	SURFACE

	BILL	OF	MATE	RIAL	FOR	CONCRE	ETE E	BARRI	ER RA	IL
BAR	BARS PER SPAN					TOTAL NO.	SIZE	TYPE	LENGTH	WEIGHT
	SPAN A SPAN B SPAN C									
JI DO									001.01	1005
* B2		28	28		_	56	<b>"</b> 5	STR	22'-2"	1295
* S4		92	92			184	<b>"</b> 5	2	5'- 6"	1056
*EPDXY COATED REINFORCING STEEL = 2351 LBS.										
	CLASS AA CONCRETE = 18.3 CU.YDS.  TOTAL LIN. FT. OF CONCRETE BARRIER RAIL = 181.8									

CORED SLABS REQUIRED							
	NUMBER	LENGTH	TOTAL LENGTH				
EXTERIOR C.S.	4	45'-0"	180'-0"				
INTERIOR C.S.	18	45'-0"	810'-0"				
TOTAL	22		990'-0"				

## NOTES

ALL PRESTRESSING STRANDS SHALL BE 7-WIRE LOW RELAXATION GRADE 270 STRANDS AND SHALL CONFORM TO AASHTO M203 EXCEPT FOR SAMPLING REQUIREMENTS WHICH SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

ALL REINFORCING STEEL CAST WITH THE CORED SLAB SECTIONS SHALL BE GRADE 60 AND SHALL BE INCLUDED IN THE UNIT PRICE BID FOR PRESTRESSED CONCRETE CORED SLABS.

RECESSES FOR TRANSVERSE STRANDS SHALL BE GROUTED AFTER THE TENSIONING OF THE STRANDS.

THE 2½" Ø DOWEL HOLES AT FIXED ENDS OF SLAB SECTIONS SHALL BE FILLED WITH NON-SHRINK GROUT. THE 2½" Ø DOWEL HOLES AT EXPANSION ENDS OF SLAB SECTIONS SHALL BE FILLED WITH JOINT SEALER MATERIAL TO 1½" ABOVE THE TOP OF DOWELS AND THEN FILLED WITH GROUT.

THE JOINT SEALER MATERIAL SMALL CONFORM TO THE REQUIREMENTS OF TYPE SL LOW MODULUS SILICONE SEALANT. THE 2" Ø BACKER ROD SHALL CONFORM TO THE REQUIREMENTS OF TYPE M BOND BREAKER. SEE SECTION 1028 OF THE STANDARD SPECIFICATIONS.

WHEN CORED SLABS ARE CAST, A POSITIVE HOLD-DOWN SYSTEM SHALL BE EMPLOYED TO PREVENT VOIDS FROM RISING OR MOVING SIDEWAYS. THIS SYSTEM SHALL BE DESIGNED TO BE LEFT IN PLACE UNITL THE CONCRETE HAS REACHED RELEASE STRENGTH, AT LEAST THREE WEEKS PRIOR TO CASTING CORED SLABS. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR REVIEW AND COMMENT, DETAILED DRAWTINGS OF THE PROPOSED HOLD-DOWN SYSTEM. IN ADDITION TO STRUCTURAL DETAILS, LOCATION AND SPACING OF THE HOLD-DOWN SHALL BE INDICATED.

WHEN A CONCRETE WEARING SURFACE IS DETAILED ON THE CORED SLAB BRIDGE TYPICAL SECTION, THE TOP SURFACE OF THE CORED SLAB UNITS SHALL HAVE A % TAKED FINISH.

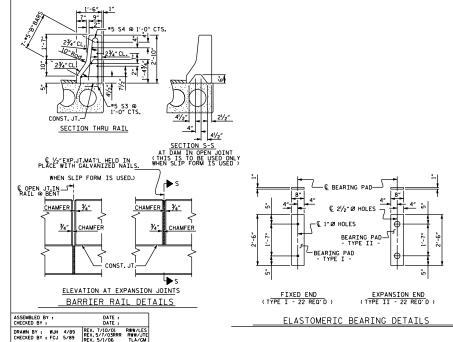
THE TRANSFER OF LOAD FROM THE ANCHORAGES TO THE CORED SLAB UNIT SHALL BE DONE WHEN THE CONCRETE HAS REACHED A COMPRESSIVE STRENGTH OF NOT LESS THAN 4,000 PSI.

ALL REINFORCING STEEL IN BARRIER RAILS SHALL BE EPOXY COATED. PRESTRESSING STRANDS SHALL BE CUT FLUSH WITH THE CORED SLAB UNIT ENDS.

APPLY EPOXY PROTECTIVE COATING TO CORED SLAB UNIT ENDS.

VERTICAL GROOVED CONTRACTION JOINTS, 1/2 TAN DEPTH, SHALL BE TOOLED IN ALL EXPOSED FACES OF THE BARRITER RAIL AND IN ACCORDANCE WITH ARTICLE 825-1080 OF THE STANDARD SPECIFICATIONS, A VERTICAL CONTRACTION JOINT SHALL BE LOCATED AT EACH THIRD POINT BETWEEN BARRIER RAIL EXPANSION JOINTS, ONLY ONE CONTRACTION JOINT IS REQUIRED AT MIDPOINT OF BARRIER RAIL SECMENTS LESS THAN 20 FEET IN LENGTH, AND NO CONTRACTION JOINTS ARE REQUIRED FOR THOSE SEGMENTS LESS THAN 10 FEET IN LENGTH.

EXAMPLE PROJECT NO. COUNTY STATION: \_ SHEET 3 OF 3 STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH STANDARD 3'-0"X 1'-9" PRESTRESSED CONCRETE CORED SLAB UNIT SHEET NO. REVISIONS BY: DATE: NO. BY: DATE: TOTAL STD. NO. PCS3

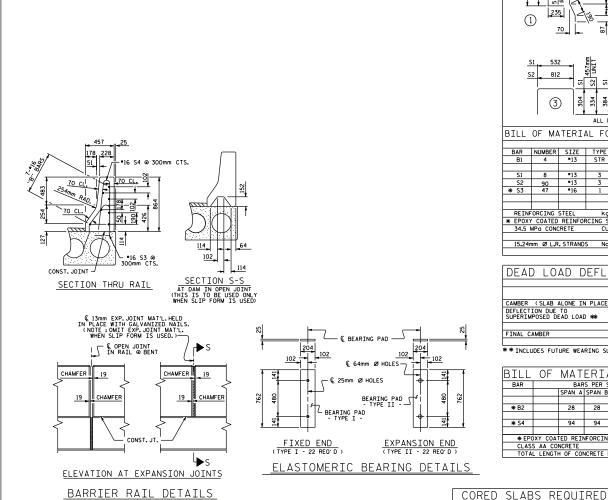


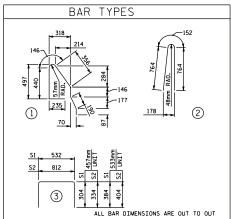
ASSEMBLED BY :

DRAWN BY: WJH 4/89 CHECKED BY: FCJ 5/89

DATE

REV. 7/10/01 RWW/LES REV. 5/7/03RR RWW/JTE REV. 5/1/06





BILL	OF MA	TIEKT	AL FUI	Y UNE	COREL	SLAB	DIATI		
				EXTERIO	R UNIT	INTERIOR UNIT			
BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT	LENGTH	WEIGHT		
B1	4	*13	STR	7160	28	7160	28		
S1	8	*13	3	1300	10	1300	10		
S2	90	*13	3	1620	145	1620	145		
* S3	47	<b>=</b> 16	1	1600	117				
REINF	ORCING	STEEL	kg		183		183		
* EPOX	COATED	REINFOR	RCING ST	EEL k	g 117				
34.5 MPa CONCRETE CU. METER					4.7		4.7		
15.24r	nm Ø L.R	. STRAND	S No.		16		16		

BILL OF MATERIAL FOR ONE CORED SLAB LINIT

ION AND CAMBER
914mm × 533mm
15.24mm Ø L.R. STRAND
28 🛊
5 ∤
23 1

\*\* INCLUDES FUTURE WEARING SURFACE

| NUMBER | LENGTH | TOTAL LENGTH | 4 | 13.800 | 55.200 |

248.400

18 13.800

22

INTERIOR C.S.

TOTAL

## NOTES

ALL PRESTRESSING STRANDS SHALL BE 7-WIRE LOW-RELAXATION GRADE 270 STRANDS AND SHALL CONFORM TO ASSHTO M203M EXCEPT FOR SAMPLING REQUIREMENTS WHICH SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

ALL REINFORCING STEEL CAST WITH THE CORED SLAB SECTIONS SHALL BE GRADE 420 AND SHALL BE INCLUDED IN THE UNIT PRICE BID FOR PRESTRESSED CONCRETE CORED SLABS.

RECESSES FOR TRANSVERSE STRANDS SHALL BE GROUTED AFTER THE TENSIONING OF THE STRANDS.

THE 64mm Ø DOWEL HOLES AT FIXED ENDS OF SLAB SECTIONS SHALL BE FILLED WITH GROUT. THE 64mm Ø DOWEL HOLES AT EXPANSION ENDS OF SLAB SECTIONS SHALL BE FILLED WITH JOINT SEALER MATERIAL TO 38mm ABOVE THE TOP OF DOWELS AND THEN FILLED WITH GROUT.

THE JOINT SEALER MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF TYPE SL LOW MODULUS SILICONE SEALANT. THE SIMM & BACKER ROD SHALL CONFORM TO THE REQUIREMENTS OF TYPE M BOND BREAKER. SEE SECTION 1028 OF THE STANDARD SPECIFICATIONS.

WHEN CORED SLABS ARE CAST, A POSITIVE HOLD-DOWN SYSTEM SHALL BE WENCYED JOP PREBUT DIDGS FROM RISING OR MOVING STEWAYS. CONCRETE HAS PRACED BESSORE OF THE REST THE WEEKS PRIOR TO CASTING CORED SLABS, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR REVIEW AND COMMENT, DETAILED DRAWTINGS OF THE PROPOSED HOLD-DOWN SYSTEM. IN ADDITION TO STRUCTURAL DETAILS. LOCATION AND SPACING OF THE HOLD-DOWNS SHALL BE INDICATED.

WHEN A CONCRETE WEARING SURFACE IS DETAILED ON THE CORED SLAB BRIDGE TYPICAL SECTION, THE TOP SURFACE OF THE CORED SLAB UNITS SHALL HAVE A 10mm RAKED FINISH.

THE TRANSFER OF LOAD FROM THE ANCHORAGES TO THE CORED SLAB UNIT SHALL BE DONE WHEN THE CONCETTE HAS REACHED A COMPRESSIVE STRENGTH OF NOT LESS THAN 27.6 MPG.

ALL REINFORCING STEEL IN BARRIER RAILS SHALL BE EPOXY COATED. PRESTRESSED STRANDS SHALL BE CUT FLUSH WITH THE CORED SLAB UNIT ENDS.

APPLY EPOXY PROTECTIVE COATING TO CORED SLAB UNIT ENDS.

VERTICAL GROOVED CONTRACTION JOINTS, 12mm IN DEPTH, SHALL BE TOOLED IN ALL EXPOSED FACES OF THE BARRIER RAIL AND IN ACCORDANCE WITH ABTICLE 825-108D OF THE STANDARD SPECIFICATIONS. A VERTICAL CONTRACTION JOINT SHALL BE LOCATED AT EACH THIRD POINT BETWEEN BARRIER RAIL EXPANSION JOINTS, ONLY ONE CONTRACTION JOINT IS REQUIRED AT MIDPOINT OF BARRIER RAIL SEMENTS LESS THAN 6.1 IN LEGGITH AND NO CONTRACTION JOINTS ARE REQUIRED FOR THOSE SEGMENTS LESS THAN 3.5m IN LERGHIHED FOR THOSE SEGMENTS LESS THAN 3.5m IN LERGHIH.

BILL	OF	MAT	ERIA	AL F	OR C	CONCR	ETE	BAR	RIER F	RAIL
BAR		BARS PER SPAN					SIZE	TYPE	LENGTH	WEIGHT
	SPAN A SPAN B SPAN C									
* B2		28	28			56	*16	STR	6800	591
<b>*</b> \$4		94	94			188	*16	2	1680	490
* EPC	*EPOXY COATED REINFORCING STEEL kg 1081									
	CLASS AA CONCRETE CU. METERS 13.9							13.9		
TOTAL	L LENGT	H OF CO	VCRETE E	BARRIER	RAIL	ME	TERS			55.200

GRADE 270 S	TRANDS
	15.24mm Ø L.R.
AREA (mm²)	140.00
ULTIMATE STRENGTH (KN PER STRAND)	260.7
APPLIED PRESTRESS	195.5

	PROJE	СТ	NΟ	Ε	XAMPL	E		
,	RUJE	101	NO.					
-					co	UNTY		
:	STAT	ION: .						
SHI	EET (	F						
	DEPA	RTME	NT OF	F NORTH CA TRAN	ROLINA ISPORTAT	TION		
	STANDARD 914mm X 533mm PRESTRESSED CONCRETE CORED SLAB UNIT							
NO.	BYs	DATE		S RY:	DATE:	SHEET NO.		
1			3			TOTAL SHEETS		
120			<b>A</b>					

STD. NO. PCS3SM